AMENDMENTS TO THE SPECIFICATION

Please amend the specification as follows:

On page 16, line 11, please replace the original paragraph with the following amended paragraph:

Inverse PCR was performed as follows based on the report by Takemoto S et al (Blood Vol 84 No9 3080-3085, 1994). Chromosomal DNAs were extracted from each sample using DNAzol (Molecular Research Center, Inc., Montgomery Rd., Cincinnati, Ohio), and the DNAs were cleaved by *Sau* 3AI, followed by subjecting the resultant to self ligation using T4 DNA ligase. By this method, DNA consisting of HTLV-1 5'LTR and the gag sequence, as well as DNA consisting of HTLV-1 3'-LTR and chromosomal DNA was constructed. To remove the DNA consisting of the 5' proviral DNA of HTLV-1, the mixture was treated with *Sac* II under heat. Using the resulting DNA as a template, two-step nested PCR was performed. The first step PCR was performed using primer 1: 5'-aagccggcagtcagtcgtga-3' (SEQ ID NO: 1) (8946-8927nt in nucleotide sequence of HTLV-1) and primer 2: 5'-aagtaccggcaactctgctg-3' (SEQ ID NO: 2) (8958-8977nt in nucleotide sequence of HTLV-1). Then the second step PCR was performed using primer 3: 5'-gaaagggaaaggggtggaac-3' (SEQ ID NO: 3) (8924-8905nt in nucleotide sequence of HTLV-1) and primer 4: 5'-ccagcgacagcccattctat-3' (SEQ ID NO: 4) (8986-9005nt in nucleotide sequence of HTLV-1). Each PCR was performed using Thermal Cycler by repeating 50 times in the first step and 35 times in the second step the cycle of 94°C for 20 seconds, 55°C for 20 seconds and 72°C for 30 seconds. A 5 μl aliquot of the PCR product was sampled and subjected to electrophoresis on 2% agarose gel. The gel was stained with ethidium bromide and the band was examined for the existence of the incorporation of clonal HTLV-1.

On page 17, line 5, please replace the original paragraph with the following amended paragraph:

The above-described electrophoresed product was transferred to a nylon membrane filter, and incorporation of HTLV-I was examined using an oligonucleotide (5'-ctccaggagagaaatttagtacac-3', (SEQ ID NO: 5) 9012-9035nt in nucleotide sequence of HTLV-1) as a probe. According to the report by Takemoto et al., the U5 region of 3'LTR of HTLV-1 containing the chromosomal gene is thought to be amplified by this method. Although the incorporation of HTLV-1 gene in ATL patients is random between different cases, the incorporation of HTLV-1 gene in ATL cells in one patient is monoclonal, so that whether the amplification of the gene is monoclonal or not can be determined by amplifying the U5 region in the 3'LTR of HTLV-1 containing the chromosomal DNA. In fact, they confirmed it by sequencing the DNA in the U5 region of the 3'LTR of HTLV-1 containing the chromosomal DNA.

On page 21, please replace table 2 with the following amended table 2:

Quantification of pX Gene	5'-sequence-3'
Forward Primer	TTC CCA GGG TTT GGA CAG AG (SEQ ID NO: 6)
Reverse Primer	CGA AGA TAG TCC CCC AGA GA (SEQ ID NO: 7)
TaqMan Probe	FAM-ATA CCC AGT CTA CGT GTT TGG AGA C-TAMRA (SEQ ID NO: 8)

On page 21, please replace table 3 with the following amended table 3:

Quantification of β-globin Gene	5'-sequence-3'
Forward Primer	ACA CAA CTG TGT TCA CTA GC (SEQ ID NO: 9)
Reverse Primer	CAA CTT CAT CCA CGT TCA CC (SEQ ID NO: 10)
TaqMan Probe	FAM-AAC AGA CAC CAT GGT GCA TCT GAC T-TAMRA (SEQ ID NO: 11)

On page 25, please replace table 7 with the following amended table 7:

Quantification of PCD1Gene	5'-sequence-3'
Forward primer	GAC AAG GCT GCC CTC TCC TA (SEQ ID NO: 12)
Reverse primer	TTA AAT CAA GAC CAG ATG TGG AAG AC (SEQ ID NO: 13)
TaqMan probe	FAM-CTT TCC CAA GAC CAG GCT GCC ACT TCT-TAMRA (SEQ ID NO: 14)

On page 26, please replace table 8 with the following amended table 8:

Quantification of 4F2 Gene	5'-sequence-3'
Forward primer	TCC TTC TTG CCG GCT CAA C (SEQ ID NO: 15)
Reverse primer	GCA TCC AGG CCA ATC TCA TC (SEQ ID NO: 16)
TaqMan probe	FAM-CGA CTC TAC CAG CTG ATG CTC TTC ACC C-TAMRA (SEQ ID NO: 17)

AMENDMENTS TO THE SEQUENCE LISTING

IN THE SEQUENCE LISTING

Please replace the Sequence Listing of record with the Substitute Sequence Listing enclosed herewith.